

1. (Currently Amended) A method of operating a flue gas purifying plant (10) having at least one absorber chamber (11) ~~in which, the method comprising:~~
~~simultaneously oxidizing~~ CO and NO ~~are oxidized simultaneously by means of~~
~~with~~ a catalyst in a first absorber (15) according to the SCONOX principle, and ~~absorbing~~
the resulting NO₂ ~~is absorbed on the catalyst surface, in which, furthermore,;~~
~~oxidizing~~ SO₂ ~~is oxidized by means of with~~ a catalyst in a second absorber (14)
connected upstream of the first absorber (15) according to the SCOSOX principle, and
~~absorbing~~ the resulting SO₃ ~~is absorbed on the catalyst surface, in which method;~~
~~separating~~ the absorber chamber (11) ~~is separated from the flue gas flow in~~
regularly recurring regeneration cycles, and ~~is regenerated by means~~ regenerating the
absorber chamber with ~~of~~ a regeneration gas containing hydrogen ~~and/or,~~ hydrogenous
compounds, or both, the two absorbers (14, 15) of the absorber chamber (11) being
regenerated one after the other, ~~characterized in that;~~
~~wherein regeneration comprising flowing gas flows through the two absorbers~~
(14, 15) against the direction of the flue gas flow ~~during the regeneration.~~

2. (Currently Amended) The method as claimed in claim 1, ~~characterized in~~
~~that comprising:~~
~~feeding~~ the regeneration gas, in the direction of the flue gas flow, ~~is in each case~~
~~fed downstream of the absorbers (14, 15); and is discharged~~
~~discharging the regeneration gas upstream of the second absorber (14).~~

3. (Currently Amended) The method as claimed in ~~either of claims 1 or~~
2 ~~Claim 1, characterized in that, during the regeneration phase, wherein regenerating~~
comprises regenerating the second absorber (14) ~~is regenerated first and then the first~~
absorber (15) ~~is regenerated~~ second.

4. (Currently Amended) An apparatus useful for ~~carrying out the method as~~
~~claimed in claim 1~~ flue gas purification, comprising:

_____ at least one absorber chamber (11) which lies in the flue gas flow and ~~can be~~ is configured and arranged to be selectively separated from the flue gas flow from time to time, preferably by dampers (12, 13), and in which the;

_____ two absorbers (14, 15) ~~are arranged one behind the other in the direction of the flue gas flow, characterized in that, in the direction of the flue gas flow, a~~;

_____ at least one feed line (27, 28) ~~provided with~~ including an inlet valve (17, 19) and ~~intended for the regeneration gas, opens the at least one feed line opening into the absorber chamber (11) in each case downstream of each of the two absorbers (14, 15) in the direction of the flue gas flow, and in that; and~~

_____ a discharge line (21) ~~provided with~~ including an outlet valve (16) and ~~intended for the used regeneration gas, branches the discharge line branching off from the absorber chamber (11) upstream of the second absorber (14) in the direction of the flue gas flow.~~

5. (Currently Amended) The apparatus as claimed in claim 4, ~~characterized in that~~ further comprising:

_____ a reformer (20) ~~is provided for producing~~ configured and arranged to produce the regeneration gas, ~~to which reformer (20) natural gas (22) or other hydrocarbons and steam (23) are fed, and in that the at least one feed lines (27, 28) are line being connected to the outlet of the reformer (20).~~

6. (New) The apparatus as claimed in Claim 4, further comprising dampers configured and arranged to separate the at least one absorber chamber from the flue gas flow.

7. (New) The apparatus as claimed in Claim 5, further comprising:
a source of natural gas or hydrocarbons in communication with the reformer; and
a source of steam in communication with the reformer.